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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/091,447	04/18/98	QUENTIN MILLET	X1770295000

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HM11/0105

EXAMINER
PAK, M

ART UNIT
1846

PAPER NUMBER

DATE MAILED: 01/05/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/591,447

Applicant(s)
Quentin-Millet et al.

Examiner
Michael Pak

Group Art Unit
1646



☒ Responsive to communication(s) filed on Oct 19, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 54-78 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 54-78 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Continued Prosecution Application

1. The request filed on 19 October 1998 (Paper No. 25) for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/591,447 is acceptable and a CPA has been established. An action on the CPA follows.
2. The amendment filed 3 August 1998, Paper No. 22, has been entered.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Applicant's arguments filed 14 November 1997, Paper No. 17, have been fully considered but they are not found persuasive.

Claim Rejections - 35 USC § 112

5. Claims 54-78 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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Claims 54-78 encompass the term "maximal amino acid identity alignment versus the total number of positions while introducing vacant positions artificially" which is not disclosed by the specification because the specification on page 11 does not establish the relationship between the homology and identity.

6. Claims 54-78 remains rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 54-78 remains indefinite and confusing for the reasons set forth in the last office action and discussed below. SEQ ID NO:1 and 3 are DNA sequences and the claims are to polypeptide thus it is not clear how a maximal homology alignment can be performed using DNA sequences.

Claims 54-78 are indefinite and confusing because of the recitation of "maximal amino acid identity alignment versus the total number of positions while introducing vacant positions artificially". Applicants have failed to identify the parameters or the algorithm for creating the alignment. As discussed in the last office action, it should be noted that quantitative determination of identity requires subjective determinations for sequences compared. The state of the art is such that one skilled in the art cannot determine what is the

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meaning of the term "identity" without a precise algorithms with parameters i.e. "scoring rules and relationship analyzed"(George et al.(T), page 130, right column, top paragraph, is cited as of interest to the applicant). For example, consider hypothetical two sequences acgtac and acac. These can be compared in any of four ways.

acgtac	4/6 = 67%	acgtac	2/6 = 33%
ac--ac	4/4 = 100%	acac	2/4 = 50%

Thus, a specific definition of "identity" must be defined taking into considerations such variables as: complete vs partial sequence and gap distances.

Claim Rejections - 35 USC § 102

7. Claims 54-77 are rejected under 35 U.S.C. 102(b) as being anticipated by Legrain et al.(AS) for the reasons set forth in the last office action and discussed below.

Applicants argue that the use of the term "obtained" overcomes the rejection. However, the term "obtained" is construed to encompass variants and derivatives because the claims encompass Tbp2 receptor which are "obtained" from the amino acid identity alignment without algorithms or parameters to obtain a precise alignment or identity. Furthermore, as discussed in the last office action, SEQ ID NO: 2 and 4 are

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identical to the TBP2 amino acid sequences of Legrain et al. (see attached sequence comparisons submitted in last office action).

8. Claims 54-76 and 78 remains rejected under 35 U.S.C. 102(b) as being anticipated by Quentin-Millet et al. (AM) for the reasons set forth in the last office action and discussed below.

Applicants argue that the use of the term "obtained" overcomes the rejection. However, the term "obtained" is construed to encompass variants and derivatives because the claims encompass Tbp2 receptor which are "obtained" from the amino acid identity alignment without algorithms or parameters to obtain a precise alignment or identity. Furthermore, the Tbp2 receptor inherently has the amino acid sequence of SEQ ID NO:2 and 4 because Tbp2 receptor of Quentin-Millet et al. is the same receptor isolated from the same strain.

9. No claims are allowed.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pak, whose telephone number is (703) 305-7038. The examiner can normally be reached on Monday through Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lila Feisee, can be reached on (703) 308-2731.

Official papers filed by fax should be directed to (703) 308-4242. Faxed draft or informal communications with the examiner should be directed to (703) 308-0294.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose

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telephone number is (703) 308-0196.

Michael D. Pak

Michael D. Pak
Patent Examiner
1646
30 December 1998